DECEMBER, 1950

"The Picture-Book of the Industry"

VOLUME 27, No. 12

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HD-19s, furnished by Highway Equipment Co., are the first choice at leading mines. They "out-push" and "out-doze" on every job . . . any time of the year . . . under any conditions. Because they are on tracks, they can be used everywhere on the jobon wet, slippery clay, on sandy or rocky going. No job's too tough to handle.

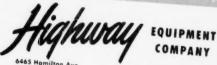
Let your Highway representative tell you today about A-C advantages. He's as close as your phone. He'll be happy to serve you promptly.





Beron Brez., Lecontes Mills, use HD-19s to push averburden and serve as scraper pushers.





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10% to 20% faster than other percussion type bits. Remember the Kennametal BIG 3 in your next bolting plans. They can save you money on drilling time OVER ANY OTHER BIT. Plan now to call a Kennametal representative in when you start to bolt up. He will be glad to give you the benefit of his specialized experience. He will also be glad to demonstrate—to make sure you have the BEST bit-SPEED, COST, and JOB considered-that your money can buy.

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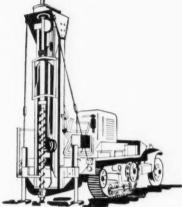
McCarthy Drills have heavier, more ruggedly built frames, with finger-tip controls, heavy-duty transmissions and alloy steel gears and shafts. Each unit is provided with an abundance of power, supplied from gasoline, diesel or electric motors.

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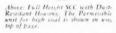
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Above: Low Height SCC with Permissible Housing, for thinseam gaseous mines. Single and multiple-outlet types.



Right: Low Height SCC with Dust-Resistant Housing, for entries and non-gaseous operations in thin seams.



Here is packaged wiring—"Mines"-built Safety Circuit Centers used with "Mines" Electrical Connectors for individual power take-offs—by far the best and most efficient power distribution system for modern mining machinery. These SCC units not only give you maximum protective value, but maximum productive machine time as well . . and they're fool-proof, trouble-free, and completely portable. Built in low or high coal models, with permissible or dust-resistant housings, in sizes and current ratings to match any mining requirement. • Let us show you how "Mines" SCC units and Connectors can give you another hoost on the road to greater production and lower costs!

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Preparation Plant at the Mays Coal Company

Deep and Strip Mining at Mays Coal Company

The story of the growth of the Mays Coal Company, Clarion, Pennsylvania, is a story of a business growth that can happen only in the United States of America.

Mr. James A, Mays is a young man who opened a coal mine in 1939 and developed his business, alone, into the most progressive coal mine operation in his district.

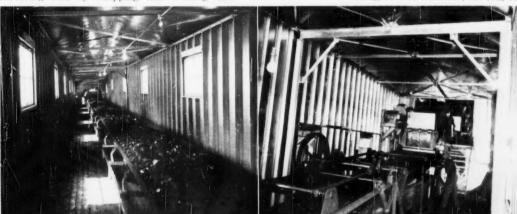
Possessing an alert and progressive mind Mr. Mays sensed the advantage of machinery in a mine over manpower and installed mechanical mining equipment just as soon as his finances permitted. Mr. Mays also saw the advantage of producing coal by stripping and

when our government broadcast a call for more coal in World War 2, he opened a strip mine to augment his production.

The Mays Coal Company now has a deep and strip mine in operation about 5½ miles southeast of Clarion. In that area the Kittanning seams of coal are present and lie from 40 to 60 feet apart. Deep mining is in the Lower Kittaning seam which varies in thickness from 23 to 56 inches. This variation in thickness of the coal limits the use of mechanical equipment and it was found that hand loading onto conveyors gave the most economical mining cost.

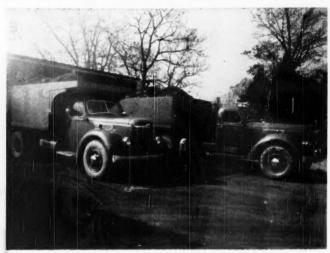
Mining is by room and pillar. Coal is undercut with 7 Goodman Model 512 cutting machines having 9 foot cutter bars, equipped with Goodman special steel, double point bits. These bits are made for medium or for hard cutting conditions. Drilling is done with C-P electric drills. The coal is hand loaded onto 7 Joy, 300 ft. long, 15 in. wide, chain conveyors, driven by 20 hp motors. Miners wear M. S. A. electric cap lamps. Air is furnished by a Model 1009 Joy, 45 by 171 a Axivane centrifugal fan, v-belt driven by a 20 hp motor.

The mainline haulage and gathering is done with one, six ton, 36-



Conveyor belt transporting coal to tipple from storage bin.

Shaking screen equipment in the preparation plant,



Motor trucks dumping into storage bin at the tipple.

inch gauge, Greensburg Cruiser type, storage battery locomotive equipped with a 48 cell, 25 plate battery with a capacity of 480 ampere hours or 44.98 kilowatt hours and two, four ton, 36-inch gauge, Greensburg Ranger type, storage battery locomotives equipped with four 42 cell, 23 plate batteries with a capacity of 420 ampere hours or 36 kilowatt hours.

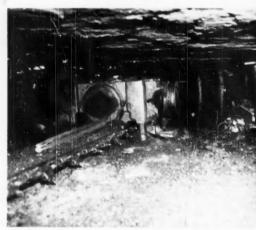
A modern concrete block building at the mine mouth houses the lamp house, the miners shower room and the supplies storage room. The miners shower room is partitioned so that each miner is provided a seperate stall. This is done to permit the miner to control shower conditions to suit himself. The partitions are only about 4½ feet high and do not effect the circulation of air or heat in the shower room.

At the present time stripping is confined to the Middle Kittanning



Above: Reciprocating feeder feeding coal onto belt conveyor in the tipple. Right: Hand pickers at top of the belt conveyor,





In the deep mine, undercutting is done with Goodman model 512 machines.



Shot coal in deep mine is loaded by hand onto Joy flight conveyors.



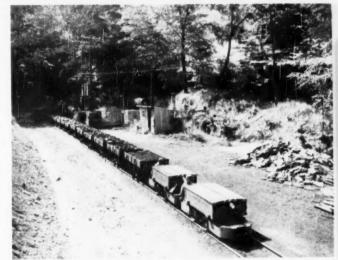
Above: Face conveyor feeding onto room conveyor.

Above Right: Room conveyor loading

into mine car in entry. Right: Two Greensburg Battery Loco-motives do all main line hauling in deep mine.

seam over the deep mine and in adjacent area. Overburden on the Middle Kittanning coal consists of loam, 8 to 50 feet of sandrock that breaks in large boulders and vellow and blue shale. Up to 60 feet of cover is being moved. The big strip pit is adjacent to the deep mine and stripping there is done with a new Manitowac Model 4500 shovel which is the largest stripping equipment on crawlers to date. This shovel has a 60 foot boom, 45 foot stick and 4 cubic yard dipper. Working with this shovel is a D-8 Caterpillar tractor. Another tractor is used about the operation doing general cleaning up and road making. Surface of the stripped coal is cleaned of remaining impurities by a small A-C road grader. In the pit over the deep mine, stripping and loading is done with a Manitowac Model 3300, assisted by an H-D 19 tractor.

Coal from the deep mine and strip pits is hauled by truck to a new preparation plant at Lime-stone, about 412 miles from the operations. The modern preparation plant was designed and built under Mr. James A. Mays supervision. Trucks dump into a bin which feeds onto a 48 inch conveyor belt which is on 133 foot long centers. This belt takes the coal to the sizing screens in the tipple where the coal passes through a 24 by 36 inch single roll McLanahan crusher. At the top of the belt the coal is hand picked before it drops into the crusher. Leaving the crusher the coal passes onto shaking sizing screens that can make up to 4 sizes. The 4 sizes can be directed to 4 railroad tracks under the tipple.





The Manitowac Model 4500 shovel stripping Middle Freeport seam. Caterpillar D-8 tractor moves top soil ahead of the stripper.



Above: Scale house and field office at the tipple Right: Inside of scale house, showing office equipment,



Grand Opening New Wilkes-Barre Office Cleveland Brothers Equipment Co.

(For Details See Page 26, October Issue)



Overall view of the new Wilkes-Barre Branch



John Zink, new salesman in Pike. Wayne, Monroe and Carbon Counties.



Left to right: Roy, Father, and Bob Cleveland.



Caterpillar Demonstration



One of the Caterpillar Scraper Units working on the Miller "B" seam east of Windber.

Scrapers Assist Strip Shovels at M. H. Bigan Coal Company In Central Pennsylvania

The strip operations of the M. H. Bigan Coal Company are located at Windber, Pennsylvania, in the mountains about 17 miles east of Johnstown. There the Central Pennsylvania coal beds are all present, some of them are strippable in limited areas.

The M. H. Bigan Coal Company has two operations going in the Windber area, one just east of Windber where some of the Miller "B" seam of coal running 42 inches thick is under low enough cover to permit stripping. At this operation the top 12 to 15 feet of overburden

is being moved with three Caterpillar D W 10 tractors powered by 115 hp Caterpillar engines, pulling 8.7 truck scrapers. These scrapers carry as much as 11 cubic yards heaped, based on 1 to 1 slope and travel as fast as 24½ miles per hour. The overburden moved by



The Osgood Model 1006 shovel stripping overburden off the Miller "B" seam.



The Osgood Model 906 shovel stripping overburden off the "C" Prime seam.



Caterpillar D-8 tractor assisting one of the smaller stripping shovels on the Miller "B" seam.



The small dragline stripping cover of the "C" Prime seam.

these scrapers consists of about 18 inches of loam then yellow shale that hardens as it deepens. Overburden moved by the scrapers is not shot but a "D" 8 Caterpillar tractor helps in loading.

The principal stripping unit at this operation is done with an Osgood Model 1006 shovel. Two Lorain shovels are also used for stripping low overburden and for loading out the coal.

The operation west of Windber is in the "C" Prime seam of coal which runs as high as 67 inches thick. At this operation stripping is carried out along crop lines and in low cover area where roof could not be held in deep mining. The principle stripping unit at this operation is an Osgood Model 906 shovel. A small dragline is also used in stripping but it is assisted on the spoil bank with a Caterpillar D-8 tractor.



One of the coal loading shovels loading out the Miller "B" seam coal.





These two groups attended the Coal Mining Institute of America Meeting and International Mine Rescue Association Dinner, held at the Wm. Penn Hotel, Pittsburgh, last December. Left to right: John T. Ryan, Jr., Executive Vice President, Mine Safety Appliances Company; Dick Johnson, Sales Representative, Mine Safety Appliances Company; Frank Powers, Maryland Bureau of Mines, J. A. Erskine, Electrical Engineer; H. G. McDowell, Purchasing; and Paul Spenock, all of the Eastern Gas and Fuel Associates, Coal Division.

Belgian Coal Mining Mission Visits U. S.



Belgian Coal Mining Mission at Luncheon following technical session with coal preparation engineers from Link-Belt Company, at Congress Hotel, Chicago, on October 5th, before flying to Wneeling, W. Va. for inspection of coal mines in No. 8 field. This team, arriving in the United States during last week of September, is on a six weeks' tour under the Economic Cooperation Administration's technical assistance program, to observe ways and means of stepping up production and lowering costs in Belgian mines. Tour conductors for group in this photo are J. A. Saxe and Lee Ray Smith, consulting engineers from Robinson and Robinson, Mining Engineers, Charleston, W. Va. Around table, from left to right, the men are:

K. F. Lange, sales manager, Pershing Road Plant, Link-Belt Company, Chicago; Jean Paul Counoy, interpreter, French Embassy, Washington, D. C.; Lee R. Smith of Robinson and Robinson, mining engineers, Charleston,

W. Va.; J. L. Erisman, Dryer Department, Link-Belt Company, Chicago; Antoine L. M. Verhaegen, Brussels, engineer, Ste. Evence Coppee and Cie.; Marcel A. L. Bouton of Halnaut, first engineer, S. A. des Charbonnages de Maurage a Maurage, Belgium; G. W. Butler, engineer, mining division, Link-Belt Company, Chicago; A. W. Holmes, asst. sales manager in charge of coal preparation and ore dressing, Link-Belt Company, Chicago; Marcel Dargent of Frameries, general manager, Societe General de Belgique, (Standing); Cornelis Tousset of Grace-Berleur, miner, Charbonnage Bonnier a Grace-Berleur; Achille Dumont of Chaussee de Charleroi, miner, S. A. Charbonnage des Houilleres Unies-Siege; Henri Joseph Antoine Stegmans of Herstal, miner, Ste. Charbonnages Bonne Esperence; Albert Jacques of Chatelineau, manager, Colliery, Charbonnages du Triep-Kaisin; J. A. Saxe of Robinson and Robinson, mining engineers, Charleston, W. Va. (Standing, left); Maurice Defourny of Brussels, director of coal mines, Societe de Bruxelles pour la Finance et l'Industrie (Brufina); L. O. Millard, asst. general sales manager for materials handling, Link-Belt Company, Chicago, (Standing, right); Jules Gonze of Marcinelie, underground manager Charbonnages de Monceau—Fontaine, Monceau sur Sambre; Jean de Boeck, interpreter, Belgium Embassy, Washington, D. C.



Supervisory officials of the Buckeye Coal Company at Nemacolin, Pennsylvania, gathered to view color motion pictures of their underground operations. The pictures were taken and shown by COAL MINING.

The Hazard Coal Operators Association held its annual meeting at the Lafayette Hotel in Lexington, Ky., on November 9, During the morning several committees held meetings and in the afternoon there was an open session business meeting. Reports from the heads of various committees and talks from others were heard during the afternoon session.

Among those appearing on the program were J. E. Tobey, President of Appalachian Coals; George S. Ward, Secretary of Kentucky Mine Operators' Association; Joseph E. Moody, President of Southern Coal Producers' Association; J. D. Battle, Executive Vice President of the National Coal Association, and John E. Tilford, President, L&N Railroad, who told the group what his railroad is doing to move coal with dispatch and efficiency.

Lewis A. Hopper, President; Mr. Hopper is Vice President, Columbus Mining Company, Allais, Ky. C. P. Gum, Vice President; Mr. Gum is General Manager, Wisconsin Coal Corporation, Wiscoal, Ky. William B. Sturgill, Secretary.



Left to right: Morris Cooper, Director of Education, National Coal Association, Jim Patterson, Manager, Youghiogheny & Ohio Coal Company and Ed Siemon, Division Manager, Hillman Coal & Coke Company and President of the golf association.

E. M. Arentzen, President Lee-Norse Company, A. E. Burgesser, Superintendent, Library Shops, Pittsburgh Coal Company, A. J. Watkins, retired, and George C. Young, DuPont Powder Company,

Western Penna. Coal Operators Golf Association Meets at Monongahela Country Club

Sees Lee-Norse Continuous Coal Mining Machine

The Western Pennsylvania Coal Operators Golf Association met at the Monongahela Valley Country Club on September 21. This Country Club is located on Route 88 between Monongahela and Charleroi, Pennsylvania, and this was the first time the Association met there. The meeting was scheduled at the country club in conjunction with the first public showing of the Lee-Norse Company's continuous Mining Machine, the "Coal Master" which is built at Charleroi. Attendants were invited to the Lee-Norse plant where they were shown the new continuous miner, then were taken to the country club for luncheon. The weather was too bad for golf but the attendance was good for the dinner.



Bill Peters, President, Stimple & Ward Company, Edwin Lee, Hulbert Oil & Grease Company and J. S. Gelston, Engineer, Allegheny Pittsburgh Coal Company.



Craig McLanahan, McLanahan-Stone Corp., R. J. McGinnis, Kennametal, Inc. and Ed Vant, Jeffrey Manufacturing Company,



G.T. McElwee, General Electric Company, George French, General Manufacturing Company, R. E. Gerdetz, President, Gerdetz Equipment Co.

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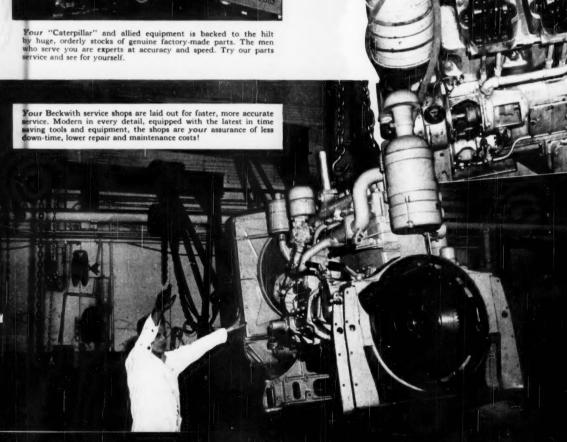
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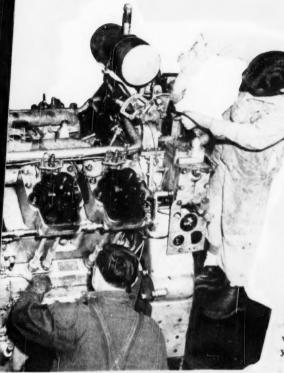


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If you haven't already enjoyed the advantages of your facilities at Beckwith, we invite you to take a sample soon. Call us when you need the best in equipment . . . call us when you need fast, accurate service . . . call us when you need parts in a hurry. Call us - today!

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There's a lot of MILEAGE in a ton of coal

Supplying both the civilian and military needs of this "nation on wheels" calls for the staggering total of 76 million tires a year! And they range from "pint-size" tires for your automobile to huge, heavy-treaded shoes for the tank-hauling Army truck in this photograph.

Making all this tough, long-wearing rubber-both synthetic and natural-takes plenty of low-cost heat and power. And most of that heat and power is produced from coal. Tire manufacture alone will take almost two million tons of coal this year.

The rubber industry and other vital defense industries, such as steel, railroads, chemicals and public utilities, need and get coals of particular kinds and grades. To supply them—and all coal customers—with a constantly improved product, the nation's progressive coal operators have built huge, modern coal preparation plants. The result? Increasingly more heat and more power from each ton of coal!

Yes, when it comes to meeting today's demands in fuel, coal is in a class by itself. For, alone among fuels, coal is available in virtually limitless quantities. And, thanks to enormous investments in new mine properties, research and mechanized equipment, the coal industry is better prepared right now than at any time in history to meet the increased demands of national defense!

Business-managed coal companies, using private capital in the time-tested American way, have brought this country's coal industry to the highest peak of productive capacity the world has ever seen. Granted a continuing supply of essential equipment, transportation, and the full use of its trained, skilled man power, the industry will produce all the coal the nation may need—in peace . . . or in war.

BITUMINOUS & COAL

BITUMINOUS COAL INSTITUTE

A DEPARTMENT OF NATIONAL COAL ASSOCIATION
WASHINGTON, D. C.

Photo by Engene Friduss takes at Aberdeen Proving Ground,



Left to right: J. H. Huddard, Purchasing Agent, Hillman Coal & Coke Company, Webb VanHorn, Summit Lumber Company, Bill Stevenson, Manager, Hillman Coal & Coke Company, Elliot Williams, Hewitt Rubber Company, and, standing, Herb Dunbar, Superior Mine Supply Company.

Left to right: Dr. Ford Edwards, Director of Bureau Economics, Morris Cooper, Director Education, Earl Maize, Director of Safety, all of the National Coal Association and Dick Johnson, Branch Manager, Mine Safety Appliances Co.

Personalities .

Appointment of four new full line Davey dealers is announced by Paul H. Davey, president, Davey Compressor Co., Kent, Ohio.

New dealers and their territories are: The Boardman Co. Oklahoma City (State of Oklahoma): Pacific Tractor & Equipment Co., Decorah, Iowa (Eastern Iowa), and Stanley Marks Tractor Co., Maumee, Ohio (vicinity of Toledo).

Dealers will handle all items of Davey manufacture. These include Air Chief and Super Chief portable compressors, "Auto-Air" truck-mounted units, "Track-Air" tractor compressors, Davey heavy duty truck power take-offs, Da-V-Lite portable lighting equipment, Mobile Machine Shops and Field Service trucks.

S. Austin Caperton, President of the Slab Fork Coal Company, was elected President of the New River Coal Association at a meeting held in Mt. Hope, W. Va., October 11. He succeeds J. M. McCauley, General Manager of the New River Com-

Other officers elected were: L. C. Campbell, Eastern Gas & Fuel Associates, vice president; S. C. Higgins, secretary and labor commissioner; and P. M. Snyder, Eastern Gas & Fuel Associates, treasurer.

L. Ebersole Gaines, President, New River Company, and J. W. Garvey, Vice President, MarylandNew River Company, were elected directors of the Southern Coal Producers Association, and J. M. McCauley, S. C. Higgins and C. R. Stahl, Eastern Gas & Fuel Associates, were named members of the Board of Arbitration.

The Scale Committee members elected were: L. Ebersole Gaines, J. W. Garvey, L. C. Campbell, S. C. Higgins, S. A. Caperton, J. F. Hunter, Scotia Coal & Coke Co., and R. H. Morris, Gauley Mountain Coal Co.

The election was held at the Lions' Club in Mount Hope, and the principal address of the day, "The Washington Picture," was delivered by Robert E. Lee Hall, Counsel, National Coal Association. Reports were given by John F. Hunter, chairman of the New River District Safety Committee, and Frank Halstead, chairman of the New River Conservation Committee.

William E. McCoy of Camden, N. J., has been named assistant sales manager of the Central Division of Caterpillar Tractor Co., Peoria, Ill., according to an announcement from J. J. Valentine, Assistant Director of Sales.

Since the war, when he served one year with the War Production Board and three years in the navy, McCov has been a district representative of Caterpillar in the Eastern Division. He joined the company in 1939 as a college graduate trainee. McCoy succeeds Herman Eberling who recently went on active duty as a captain in the U. S. Corps of Engineers.

Charles C. Dickinson, Jr., was named President of the Kanawha Coal Operators Association, at its 46th Annual Meeting held at the Kanawha Country Club, Charleston, W. Va., Oct. 19. A. L. Wilson was named Vice-President; Harry G. Kennedy was named Executive Secretary and John L. Dickinson, Treasurer.

Effective at once, the Flood City Brass & Electric Company, Johnstown, Pennsylvania, will turnish all replacement parts for hoists made by the J. C. Scine Company, Tyrone, Pennsylvania.

R. C. Scott, President of the Cornett-Lewis Coal Co., was elected President of the Harlan County Coal Association at the group's annual meeting.

The meeting was generally acclaimed as very successful, Charles I. Dawson, a former Federal judge and trustee of the UMW welfare and Retirement Fund, presided as toastmaster. L. C. Goering, Coal Traffic Manager of the L&N Railroad, addressed the group on "Transportation Prospects for the Coming Year." John D. Battle of the National Coal Association spoke on "The Washington Picture;" and Joseph E. Moody of the Southern Coal Producers' Association spoke on "Labor Relations."

officers elected were: R. C. Scott; M. M. Ellison, Vice President, Mr. Ellison is General Manager of the Southern Harlan Coal Company, Lenarue, Ky. George S. Ward was reelected Secretary.

T. C. Cheasley, Secretary of the Missouri Coal Operators Association, reports that that organization has renewed the Association's scholarship at the Missouri School of Mines for an additional year. Under this scholarship school officials will select a worthy student as recipient of this valuable scholarship.



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J. B. Davies, manager of the Industrial Department of Mine Safety Appliances Company, Pittsburgh, has been elected president for 1951 of the Veterans of Safety, an international organization of persons actively engaged full time in safety work 15 years or more.

The association, through its 700 members including the country's outstanding safety engineers and accident prevention authorities, assists the National Safety Council and other groups concerned with conservation of human life, in solving new problems related to the field.

It also encourages the teaching of safety engineering in technical and trade schools.

Mr. Davies has been associated with Mine Safety Appliance Company for 30 years. He joined the company as a chemist after attending Carnegie Institute of Technology.

Mr. Ireland, vice president, Pittsburgh Consolidation Coal Company, has been elected president of Bituminous Coal Institute, public relations department of the National Coal Association. He succeeds Fred S. McConnell, president, Enos Coal Mining Company, who asked that he be relieved of the office which



he had held for several years. D. W. Buchanan, Jr., president of Old Ben Coal Corporation, was elected vice president. Retained in office by the board of director were R. H. Knode, president, Stanega Coke and Coal Company, treasurer, John D. Battle, executive vice president of NCA; and Ralph C. Mulligan, director of public relations.



Link-Belt Company, manufacturer of materials handling and power transmission equipment, has appointed Bertram V. Jones Advertising Manager, to succeed Julius S. Holl, deceased.

Franklin H. Mohney of Brookville, Pennsylvania, has been appointed Executive Secretary of the Mineral Producers Association of Kittanning, Pennsylvania, succeeding Robert T. Laing. Prior to his assuming his new position, Mr. Mohney was Educational Program Director with the U. S. Air Forces in Ashiya, Japan. At the outbreak of World



War II he enlisted in the Army and served as Captain of Antiaircraft Artillery. Upon his release he did graduate work at the University of Pennsylvania and the University of Pittsburgh.

The Mineral Producers Association is the trade organization





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of companies engaged in, or interested in, the production of bituminous coal by open pit methods in Pennsylvania. It maintains offices in the Empire Building in Kittanning. Organized in 1943 the association has been working closely with the operators and government officials on problems relating to the industry, problems such as reforestation, stream pollution and other conservation measures.

Formation of a new Round Associate Chain Company with headquarters in Chicago was announced recently by James W. Dickey, vice president and treasurer

The new concern will be known as THE ROUND CHAIN AND MFG. CO. It will be directly affiliated with the five other Round Chain plants which produce industrial, marine, railway, automotive, building, home and farm chain of every type. These affiliated concerns are The Cleveland Chain & Mfg. Co., Cleveland, Ohio; The Bridgeport Chain & Mfg. Co., Bridgeport, Conn.; Round California Chain Co., So. San Francisco and Los Angeles, Cal.; Seattle Chain & Mfg. Co., Seattle, Wash., and Woodhouse Chain Works, Trenton, N. J.

General offices and warehouses of The Round Chain & Mfg. Co. will be at 646 West Lake St., Chicago.



Mr. John F. Ansink, new general manager of The Round Chain & Mfg, Co.

Organization of the new company will facilitate faster handling of customer orders, according to Mr. Dickey. It will also provide an efficient means of distributing the varied chain products and complete lines of all Round companies to chain users.

Through arrangement with The Cleveland Chain & Mfg. Co., emergency needs of that company's customers will be shipped from Chicago.

John F. Ansink, former district manager of The Cleveland Chain & Mfg. Co., will be gencral manager of The Round Chain & Mfg. Co. He has been affiliated with the Round Chain organization for the past 14 years.

Company president will be Raymond L. Round, who holds a similar position in all of the ROUND associate companies. He is a grandson of David Round who founded the ROUND chain companies in 1869 and a son of Louis D. Round, former president, who died in 1938.

David J. Gemmell, vice president and director of sales of The Cleveland Chain & Mfg. Co., will serve as chairman of the company's executive committee.

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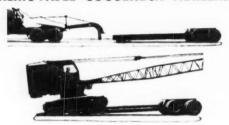
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BULLETINS . . .

COAL FROTH-FLOTATION UNITS: Wilmot Engineering Co. bulletin FF501 shows installation records of their new separation units. The machine features concentration of ail operations in one unit, resulting in savings of floor space, operating time, power and labor costs. Completely automatic with visual and audible signals.

Marion Power Shovel Company of Marion, Ohio, is announcing the publication of Bulletin No. 401 which outlines the design and operating features of the Marion Type 93-M Ward-Leonard Electric machine.

Built for heavy-duty service on long-term jobs in quarry, metal mining, coal and construction, this machine incorporates Marion Ward-Leonard electric controls for all major operating motions, including hoisting, swinging, propelling and crowding.

Economical operation and high operating speed result from the use of new and compact 600 line motors on the Marion 93-M Ward-Leonard. The smaller size of these motors

gives them low armature inertia, permitting faster starting, stopping and reversing and requiring less

The Marion 93-M Ward-Leonard machine is presented as a companion unit to the Marion Type 93-M Diesel machine.

Bulletin No. 401 can be secured from Marion sales representatives and distributors or from the company's general offices in Marion, Ohio.

Machines For Sale

Sturdevant No. 10 Blowers, 35,000 cu. ft. with 150 H. P. 220 volt motors and starters, like new.

Roots Size 16, Type A Blower, 6,000 cu. ft. per minute with 60 H. P. 220 volt motor, excellent.

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Coal Drills, Stationary Motors AC and DC.
Drill Presses, Power-Saw, Pipe
25, 5u, and 75 H. P. Incline Hoists
Coal Crushers, Wilmot and Link Belt,
600 Five Gallon G. I. Cans
Storsac Fans, 12000 Gallon,
2—Dump Trailer, 15 ton capacity with
Mark Tretors.
G. E. 601 Locomotive, 42" Ga. with reel,
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25, 35 40 & 56 lb, Rail,
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250 Vol's.
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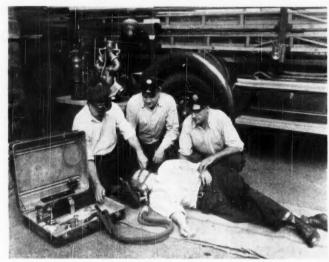
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New Products

• MINE SAFETY APPLIANCES COMPANY



New life-saving apparatus introduced Monday (October 16) at the National Safety Congress in Chicago, is demonstrated by firemen. Developed by the Mine Safety Appliances Company, Pittsburgh, the automatic breathing instrument is called a "Pneolator." It can be safely used, the company said, for treating victims of any kind of asphyxiation.

BONDED SCALE & MACHINE COMPANY



The new Bonded line of heavy duty flight conveyors is definitely in the low price field. Built in any length, and with flight sizes ranging from 12" x 2" up to 24" x 8". All welded steel truss construction with heavy one-piece cross section

load carrying pan. Flights are hung from double chains. The chains are guided on both loaded and return levels to assure freedom of movement, and the top chain level is covered to reduce abrasion on the chain while load is carried. All chains have easily detachable links, making it easy to lengthen convevor when necessary.

Heavy plate sprockets at each end are mounted on a through shaft, turning in precision sealed bearings. All lubrication and adjustment points are accessible from the outside. Choice of electric, gasoline, or diesel power; and choice of chain speeds. Variable speed control available.

High, flared sides allow full capacity to be carried without danger of spillage, up to angles of 5 degrees. Special features, such as bottom discharge gates and loading hoppers, are built to order. For prices and Bulletin 952, write to Bonded Scale & Machine Company, Columbus 7, Ohio, U. S. A.

• LEE-NORSE COMPANY

The Lee-Norse Company. Charleroi, Pennsylvania, introduced a new coal cutting and loading machine which will be known as the KOAL-MASTER.

This new machine is of the continuous mining machine type which cuts and loads the coal from a solid vein without the use of explosives. The KOAL-MASTER employs an entirely new method of cutting and breaking the solid coal from the face.

It is mounted on rubber tires, weighs approximately 18 tons and has these overall dimensions:

46" High Wide 26' 7" ____Long

The machine is suitable for high coal veins such as Pittsburgh Seam of Coal—60" to 96" high.

Production capacity is estimated at

- 3 Tons per minute maximum
- 75 Tons per hour normal output with a seven man crew
- 1 KOAL-MASTER operator 1 KOAL-MASTER helper
- 2 Roof Control men (Timbering or Bolting)
- 1/2 Mechanic 1/2 Face boss

7 Man Crew

The KOAL-MASTER is now going through extensive factory tests and will be installed in one of Greene County's high production mines for further tests within the next few weeks.

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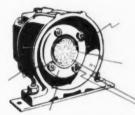


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Addition of silicone to "Snow-Rem," liquid snow plow wax, is announced by Manufacturer, Speco, Inc., Cleveland.

This is reputed to provide an even smoother glass-like surface than has been previously possible with the wax, It also increases the lasting qualities of each wax application, When applied to plow wings and moldboards, "Snow-Rem" produces a hard, slick surface off which snow slides easily. It helps to prevent the piling up of snow and eliminates costly delays ne-cessitated by "clearing" or breakdowns from overloading. Ac-cording to the manufacturer, "Snow-Rem" may increase plowing

speed as much as 25 per cent.
"Snow-Rem" has a high Carnauba wax content and can be applied with an ordinary paint brush or spray gun. Tempera-ture at application should be above freezing and plow surface should be dry. It is recommended that users apply their first coat of wax in the fall before plows are put in service, "Snow-Rem" also acts as an effective means of preventing rust.

A plow may be placed in service within 20 minutes after application. One gallon of wax covers 250 sq. ft. by brush applica

"Snow-Rem" is available in 1-gal. open top cans; 5-gal. pails and 55-gal. drums. It is sold by leading equipment distributors and may be secured direct from the manufacturer.

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Poles are made of straight grained wood and are it regother with removable wood pins held in in recessed grooves by a righter hand and can

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No.	25	Powder	Box\$3.10 Box\$4.20	6		9	Sizes 2 Cop Bo	1," x 3" Inside x \$1.70	

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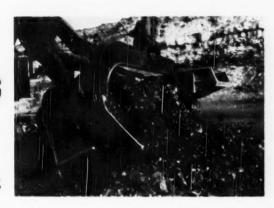


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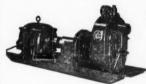
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1—7500 cfm Claraga 71; hp. 220/440 v. 2 speed motor

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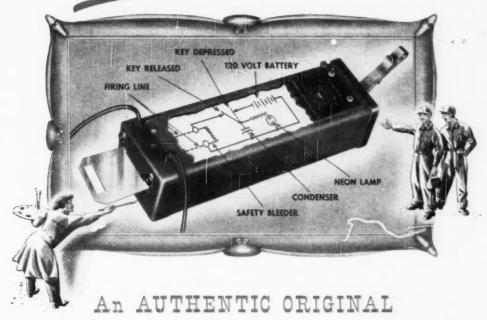
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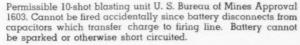
Now, whether in mine or open pit blasting, the critics, the men who mine, use the Femco, the lightest, surest and safest 1 to 10-shot firer in the long history of coal.

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Weighs slightly over 1 lb. Can be carried and fired from belt. Insertion of Safety Key charges capacitors from battery; neon light gives "ready" signal, and charge is fired by removing Safety Key.

SAFETY



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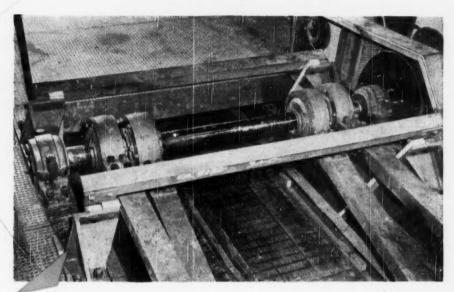
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